# Nonischemic Priapism Following Penile Tattooing

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DOI: 10.1111/j.1743-6109.2011.02579.x

**ABSTRACT**

***Introduction.*** To our knowledge, here we report the first case of nonischemic priapism following penile tattooing.
***Aim.*** To report the first case of nonischemic priapism following penile tattooing.
***Methods.*** A case with tattooing-induced priapism is presented including subjective reporting, physical examination, and laboratory/radiologic evaluations.
***Results.*** A 21-year-old man, presented with partially rigid penis of 3-month duration. On examination, the penis was half rigid, with a tattoo on its dorsal surface, and a smaller tattoo on the glans (Figure 1). The patient initially stated that the tattoo had been created years ago, but later admitted that he had it created just before the occurrence of priapism. A traditional tattooist created the tattoo manually, using a handheld needle. Bleeding from deep penile tissue for several days complicated the tattooing.

Known etiologies of priapism were investigated and ruled out. Specifically, perineal injury, leukemia, sickle cell trait, thalassemia, urinary tract infection, neurogenic, neoplastic, infectious, toxic, and pharmacological causes were actively investigated and ruled out. There was no history of alcohol consumption or smoking. Aspirated penile blood was bright red. Cavernous blood gas measurements confirmed high oxygen and low carbon dioxide content, diagnostic of arterial priapism.

There was no embolization facility in Kermanshah. In fact, there are few experts in superselective embolization in Iran. We referred the patient for superselective embolization. However, he underwent a nonindicated Sacher procedure. Predictably, the procedure was unsuccessful. At present, the patient continues to have priapism. Because of the painless nature of erections, moderately good preservation of erectile function during intercourses, and disappointment with former surgery, the patient declined further therapies, and he lives with his condition.
***Conclusions.*** Tattooing should be added to the etiologies of nonischemic priapism. Considering this case, we discourage penile tattooing. **Zargooshi J, Rahmanian E, Motaee H, and Kohzadi M. Nonischemic priapism following penile tattooing. J Sex Med 2012;9:844–848.**

***Key Words.*** Tattooing; Priapism; Injections

## Introduction

Priapism refers to an obscure disorder of unwanted, persistent penile erection [1]. Its obscurity pertains variously to its relative rarity, its often inconsistent clinical presentation, and its fairly unclear pathophysiologic mechanisms. Moreover, the disorder has paradoxical implications, invoking superior sexual prowess and virility while actually signifying a pathologic and nontrivial entity [1]. A classification system is commonly used to differentiate clinical presentations of priapism. The main divisions of ischemic and nonischemic priapism have practical ramifications with respect to overall clinical management. Presentations classified as ischemic priapism are frequently associated with irreversible cavernosal tissue damage and subsequent erectile function loss, whereas those classified as nonischemic priapism presumably do not incur such consequences [1].

Concerning ischemic priapism, urgent medical attention should be sought for an erection lasting >4 hours [2]; 90% of cases with priapism >24 hours

 

develop complete erectile dysfunction [2]. The time interval of 4 hours has frequently been cited as a qualifying criterion since on a practical basis, pathologic consequences are associated with priapism extending beyond this time limit. However, presentations of shorter durations and conversely those lasting days or months that may not overtly result in erectile tissue damage are identifiable as representing priapism [1]. In light of multiple observations, the meaning of the term appropriately encompasses a multifactorial entity of genital organ tumescence or rigidity that develops and persists in a pathologically uncontrolled fashion for any duration without sexual purpose [1]. Blood gas testing and color duplex ultrasonography are highly reliable diagnostic methods to distinguish between ischemic and nonischemic priapism. Arteriography is not routinely used for diagnosis and is otherwise usually performed as part of an embolization procedure for nonischemic priapism [1].

Decorative tattooing is made by introducing exogenous pigments and/or dyes into the dermis to permanently mark the body for decorative or other reasons [3]. This procedure may result in various complications. The sexual medicine practitioners should be aware of these potential complications. The present report describes a case of nonischemic priapism due to penile tattooing. Based on a thorough Pubmed search, this is the first report of penile tattooing being associated with the development of nonischemic priapism.

**Figure 1** Penile tattooing. The tattoo on dorsal penis reads in Persian "*borow be salaamat*" ("good luck with your journeys"). Also note the tattooed English letter "M" on the glans ("M" was the first letter of the first name of the patient's girlfriend).

## Case Report

A 21–year–old patient, presented with partially rigid penis of 3-month duration. On examination, the penis was half rigid, with a tattoo on its dorsal surface. Also there was a smaller tattoo on the glans (Figure 1). The patient initially stated that the tattoo had been created several years ago, but later admitted that he had the tattoo created just before the occurrence of priapism. A traditional tattooist created the permanent decorative tattooing manually, using a handheld needle. No electric machine was involved. Bleeding from deep penile tissue for several days complicated the tattooing. For 8 days after tattooing, the penis was painful, and thus there were no erections. After that, the patient noticed longer-than-usual sleep-related erections. This progressed, within a week, to a constantly half-rigid penis, day and night.

Known etiologies of priapism were searched and ruled out. Specifically, perineal injury, leukemia, sickle cell trait, thalassemia, urinary tract infection, neurogenic, neoplastic, infectious, toxic, and pharmacological causes were actively investigated and ruled out, based on history taking and laboratory evaluations. There was no history or were no signs and symptoms suggestive of syphilis, brain tumors, epilepsy, and brain and spinal cord injury. There were no clinical findings suggestive of primary or metastatic neoplastic processes, disk herniation, spinal cord stenosis, or cauda equina compression. Also, a brain and lumbosacral CT was negative. There was no history of anesthesia, alcohol consumption or smoking. Complete blood count (red blood cells count: 5.1 million cells/mcL (microliter), white blood cells count: 7,000 cells/mcL, hematocrit: 45.7, hemoglobin: 15.8 gm/dL, mean corpuscular volume: 84 femtoliter, mean corpuscular hemoglobin: 28 pg/cell, and mean corpuscular hemoglobin concentration: 34 gm/dL), white blood cell differential (neutrophils 62%, band forms 3%, basophils 1%, eosinophils 1%, lymphocytes 29%, monocytes 4%), and platelet count (270,000/mcL) were negative for acute infections or hematologic abnormalities. Reticulocyte count (0.9%) and hemoglobin (Hb) electrophoresis (Hb A: 97.1, Hb A2: 2%, Hb F: 0.9%, Hb S: 0%, and Hb C: 0%) were negative for sickle cell disease or trait as well as other hemoglobinopa-